CHAPTER 4

MATERIAL IDENTIFICATION

This chapter discusses what is meant by material identification. Why it is necessary. The way material is identified, and the tools that are available for you to use in identifying material. The problem of material identification is not peculiar to the Navy nor to the military. You probably have had occasion to purchase a part for your car or for an appliance or to use a mail order catalog. These items were all identified by a catalog or part number. This is the material identification system used by that manufacturer or supplier. They use it for the same reason the Navy does. It is a brief, accurate means of identifying one specific item of material. Each company develops a system to meet its own needs.

There are over four million supply items in the Department of Defense (DOD) Supply System. The Navy Supply System alone stocks over one million items When requisitioning a specific item from a supply activity, you must use the common language that has been developed to accurately identify the item. This tool is known as the Federal Supply Catalog System.

FEDERAL CATALOG SYSTEM

The Defense Logistics Agency (DLA), administers the Federal Catalog System. This includes naming, describing, classifying, and numbering of all the items carried under centralized inventory control of the Federal Government. The publication of related identification data is also part of this task. The Federal Catalog System also is used by North Atlantic Treaty Organization (NATO) countries.

FEDERAL SUPPLY CLASSIFICATION SYSTEM

The Federal Supply Classification (FSC) system is designed to classify all items of supply used by the Federal Government. Each item of supply is classified in one, and only one, four-digit Federal supply class. The first two digits denote the group or major division of commodities the last two digits denote the class or subdivision of commodities within a group. As presently established, the FSC consists of 76 groups (some currently unassigned). These stock groups cover rather broad categories of material. Therefore, they are subdivided into classes. There are approximatey 600 classes assigned to the 76 groups.

The number of classes within each group vary. Each class covers a particular area of commodities, in accordance with their physical or performance characteristics, or based on the fact that the items in the class are usually requisitioned or issued together. You will learn the frequently used classes within the groups by using them. Examples of how the classes are used to divide types of material as shown in figure 4-1.

Together, the stock group and class are known as the FSC.

The Defense Logistics Agency Cataloging Handbooks, H2-1, H2-2, and H2-3 contain a complete listing of assigned federal supply classification classes.

You will notice that the Federal supply groups starts with group 10. The Navy uses the groups 01 through 09 for forms and publications which are not included in the Federal Catalog System.

NATIONAL STOCK NUMBER

The national stock number (NSN) for an item of supply consists of a four digit FSC group and class, and

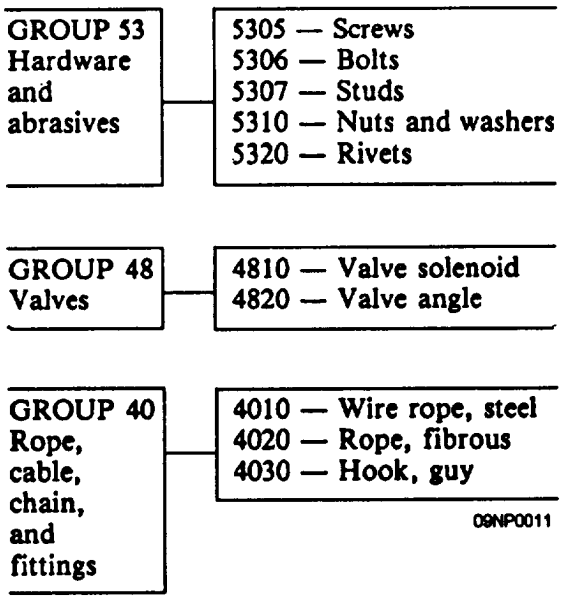


Figure 4-1.-Classes of material within stock groups.

a nine-digit national item identification number (NIIN), The NIIN consists of a two-digit national edification bureau (NCB) code (which will be discussed separately) and seven digits which in conjunction with the NCB code, uniquely identify each NSN item in the Federal supply distribution system. Figure 4-2 shows the elements of an NSN in the order they are written.

Cognizance Symbol

A two-part cognizance symbol is used by the Navy to provide supply management information. Then are 94 cognizance symbols currently in use. The majority of stock transactions aboard ship use cognizance symbols 1H, 9C, 9G, 9N, 9Q, and 9Z. The first part is a single number that tells in what the stores account the material is carried in the supply system. Briefly, the numerical part of the cognizance symbol indicates the following:

1,3,5,7	Material is held in the Navy Stock Account (NSA). When this material is issued, it must be paid for by the requisitioner.
9	Material purchased by the Defense Stock Fund and held in NSA. When this material is issued, it must be paid for by the requisitioner.
2,4,6,8	Material held in the Appropriations Purchases Account or nonstores account. This material is issued without charge to the requisitioner.

The second part of the cognizance symbol is a single-letter code that designates the inventory manager or inventory control point (ICP) that has cognizance, or control, of the material. These inventory managers may be Navy or Defense activities.

Material Control Code

The material control code (MCC) is a single letter code assigned by the inventory manager to indicate the rate of usage or to designate those items having special reporting and/or control requirements. The MCC is discussed further in the latter part of this chapter.

National Codification Bureau (NCB) Code

An NCB code is a two-digit code which is included as the fifth and sixth digits of an NSN or a NATO stock

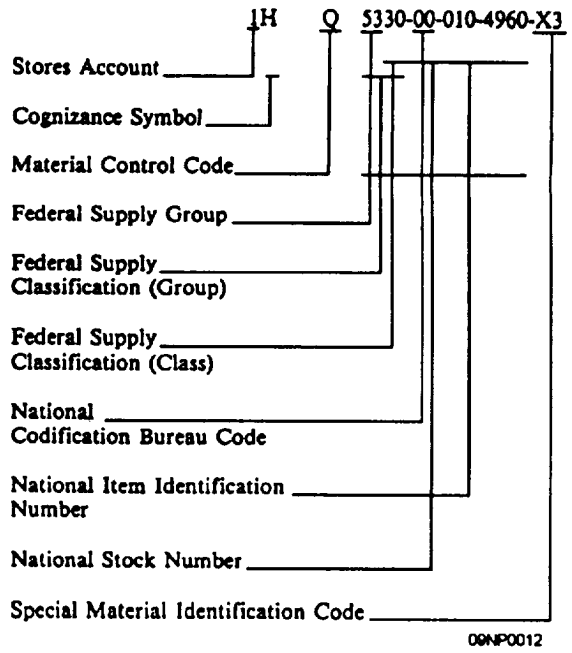


Figure 4-2.-National stock number for an Item of supply.

number. It identifies the country that assigned the stock number or it indicates that the stock number is used by two or more countries. The NCB codes currently assigned are listed in the NAVSUP P485.

National Item Identification Number

The national item identification number (NIIN) is a nine-digit number which identifies each item of supply used by the DOD. The NIIN indexes or relates to identification data information which makes it different from every other item. The amount and type of identification data depends on the item and its intended use. Although the NIIN is part of the NSN, it is used to independently identify an item. Except for identification lists, most Federal supply catalogs are arranged in NIIN order.

Stock records are also maintained in NIIN order as are load lists and consolidated allowance lists.

Navy Item Control Numbers

Items of material that are not included in the Federal Catalog System, but stocked or monitored by the Navy Supply System, are identified by Navy item control numbers (NICNs). NICNs are 13-character item identification numbers. They are assigned by ICPs or other Navy item managers for permanent or temporary control of selected non-NSN items under their

cognizance. The NAVSUP P485 covers NICNs in detail.

Local Item Control Number

Local item control numbers (LICN) may be assigned to shipboard stocked consumable items which are not identified by an NSN, a NATO stock number, or another type of NICN. An LICN consists of 13 characters. The first four numbers correspond to the FSC of similar NSN items, the fifth and sixth (NCB code area) are "LL," and the remaining seven are all numbers. (See figure 4-3.)

Locally assigned item control numbers are authorized for local use only (i.e., for shipboard stock records, locator records, bin tags, issue documents, etc.). They are not used for requisitions since they would be meaningless to the supply source.

Special Material Identification Code

Special material identification code (SMIC) is a two-position alpha or alphanumeric code assigned by the Commander, Naval Supply Systems Command to NSN items which require:

- Source of quality control
- Technical design or configuration control
- Special controls for procurement, receipt, inspections, test, storage, and issue

Appendix 9L of the NAVSUP P485 lists the current authorized SMICs. These codes are shown in the Management List-Navy (ML-N) in the column headed "Material Management Code (MMC)," and are considered supplemental to the NSN. When an SMIC is assigned to an NSN item, the SMIC will be suffixed to the NSN in all supply documents and records.

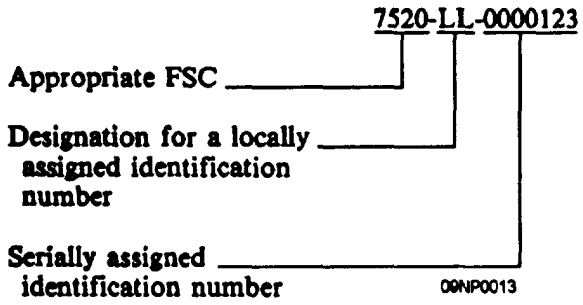


Figure 4-3.—Local Item control number.

Technical Manual Identification Numbering System (TMINS)

The TMINS is a plan for classifying, indexing, and numbering Navy technical manuals to encourage standardization and modernization. The 13-character number, patterned after the 13-digit national stock number, serves both as the technical manual identification number and as the number used to requisition a particular technical manual. TMINS numbers are authorized for use on DD Forms 1348 or message requisitions in DD Form 1348 form at using RIC A04 or A0D, as appropriate. See NAVSUP P-485 and NAVMATINST. 4160.1 for further information on the TMINS.

IDENTIFICATION ABOARD SHIP

You should be able to identify both the material in your ships storerooms and the material requirements of your ship. You do this by converting item nomenclature or description into NSNs assigned in the Federal Catalog System.

All items of stock must be recorded on stock record cards. Any action which affects the quantity or value of that stock must also be recorded. For this reason, all stock transactions, receipts, and expenditures use NSNs to make sure they are posted to the right stock card. If you use the wrong NSN to requisition material for the ship, you will probably receive an item that the ship cannot use. Not only will the ship have spent its money uselessly, but an item that may be urgently needed by another ship or station will not be available. There is also the additional delay of waiting for the right item material to be ordered and received.

When taking inventory in a storeroom, you must use the right NSN or the count may be posted to the wrong stock card. To help prevent errors in inventory and issues, all stock in the storerooms should be marked with the right NSN. To do this you should:

- Place a stock tag on the front of the bin or drawer if it contains only one type of material.
- Fasten a stock tag to the item.
- Write the NSN on the item with marking pen or other permanent marking. It only takes a short time to mark stock properly when it is inventoried or received. It can save you a lot of time later on.

TERMS

It is important to have a clear understanding of the terms used in the material identification process. The following terms are used in this process:

MATERIAL—refers to supplies, repair parts, equipment, and equipage used in the Navy.

EQUIPMENT—any functional unit of hull, mechanical, electrical, ordnance, or electronic-type material, It operated by itself or as a component of a system or subsystem. Equipment is identified by a component identification number (CID), numerical control code (NCC), allowance parts list (APL), or similar designation.

SUPPORT EQUIPMENT—is equipment such as test equipment, fixtures, hand tools, etc., required for the maintenance, assembly, disassembly, overhaul, repair, and test or check of an end item of equipment.

EQUIPMENT DIVISION—The standard terms that describe the breakdown of electrical, electronic, mechanical, pneumatic, and hydraulic military equipment. They are explained as follows

- Part—one or more pieces joined together. Normally, disassembly prevents them from being used as designed (e.g., outer front wheel bearing of a truck, an electron tube, a composition resistor).

- Subassembly—is two or more parts which form a portion of an assembly or a unit that can be replaced as a whole. It may have a part or parts that can be individual y replaced (e.g., gun mount stand, window sash, recoil mechanism, floating piston, telephone dial, terminal bead with mounted parts).

- Assembly—a number of parts, subassemblies or any combination, joined together to perform a specific function (e.g., power shovel front, fan assembly, audiofrequency amplifier). The distinction between an assembly and a subassembly is not always exact. An assembly in one instance maybe a subassembly in another (i.e., when it forms a portion of an assembly).

- Unit—an assembly or any combination of parts, subassemblies, and assemblies mounted together, normally capable of independent operation in a variety of situations (e.g., hydraulic jack, electric motor, electronic power supply, internal combustion engine, electric generator, radio receiver). The size of an item is a consideration in some cases. An electric motor for a clock may be considered as a unit, because it is not normally disassembled.

- Group—a collection of units, assemblies, or subassemblies which is a subdivision of a set or system. It is not capable of performing a complete operational function (e.g., antenna group, indicator group).

EQUIPAGE—items which require management control afloat because of one or more of the following factors:

- High unit cost
- Vulnerability to pilferage
- Essential to the ship's mission

Equipage does not include installed mechanical, electrical, ordnance, or electronic equipments, components, or systems. Equipage items are usually identifiable to an end-use application aboard a ship. Allowed quantities of the item are determined on an individual ship basis. Chargeable items of equipage are identified in procurement, receipt, and consumption documents by the letter "E" in the second position of the applicable fund code. (See NAVSO P-3013.)

- Controlled Equipage—to those items of equipage that require special management control because the material is:

1. essential for the protection of life, or
2. relatively valuable and easily convertible to personal use.

Controlled equipage (e.g., life preservers, gas masks, binoculars, and firearms) is usually carried on board in allowance quantities only, and require special inventory control in accordance with NAVSUP P-485.

- Equipment and Equipage Replacements Funded by a Type Commander as Controlled Equipage—durable, high priced, and essential items of equipment and equipage not designated as controlled equipage. These are normally replaced during a ship's regular overhaul only. Replacement of such items as anchors, shots of chain, chain stoppers, binnacles, pelorus, and laundry equipment during a regular overhaul, are chargeable to overhaul funds. If replacement of these items is required between overhauls an OPTAR augmentation is normally requested from the type commander.

REPAIR PART—any item, including modules and consumable-type materials, which has an equipment

application and appears in an APL, stock number sequence list (SNSL), integrated stock list (ML), Naval Ship Systems Command drawings, or a manufacturer's handbook. Section A of Part III of the COSAL (SNSL of storeroom items) lists equipment-related consumable and repair parts normally stocked by the supply department. Any item in Section A is considered a repair part.

CONSUMABLE—administrative and housekeeping items, common tools, paints, cognizance symbol 11 forms, or any other items not specifically defined as equipage or repair parts. Materials such as general-purpose hardware, metals, lumber, and lubricating oil also are considered to be consumable in procurement transactions. But, they are be treated as repair parts in shipboard issue transactions when the material is to be used to accomplish maintenance actions.

REPAIRABLE— a component or part designated by the cognizant inventory manager as an item which can be economically repaired when it becomes unserviceable, Repairable items are identified by material control code (MCC) D, E, G, H, Q, or X. MCC D items maybe disposed of locally when they become unserviceable and cannot be repaired (by an organizational or intermediate maintenance activity. MCC E, G, H, Q, and X items are mandatory turn-in repairable. These items must be transferred to a designated depot level repair facility collection point (see indicated in the Master Repairable Item List (MRIL)) when they become unserviceable and cannot be locally repaired. (See NAVSUP P-485, for more information.)

CIRCUIT SYMBOL— used for electronic equipment in the same way that part numbers, drawing numbers, etc., are used for other equipment. Most circuit symbol numbers are cross-referenced in the APLs to an NSN for the particular part required.

END ITEM— a combination of products, component parts, and/or materials that are ready for final intended use. It is an equipment of one of its major subdivisions.

ARTICLE-a collection of items within a class (e.g., ensign, all nations or hats, white all sires).

ITEM— each size or color, of an article (e.g., ensign U.S. No. 7).

REPLACEMENT ITEM— an item supplied as a spare or repair part in place of the original part. Replacement items are not necessary interchangeable with the items they replace. They may be of better quality or may have greater capacity. Replacement items are not substitutes because they are supplied on a continuing basis.

MAKE ITEM— an item that is made from raw or bulk stock or by modifying other stocked items. They are not procured for stock or issue in finished form. Make items are source coded "MF" or "MO" in the COSAL.

EQUIVALENT ITEM— an item similar to another item to the extent that its characteristics are in strict accordance with the specifications for the item it may replace. Repairable assemblies are equivalent only if their "purchased repair parts" and performance are also equivalent. "Purchased repair parts" are limited to those items of a design peculiar to the repairable assembly concerned.

INTERCHANGEABLE ITEM— a nonequivalent item used in place of another item in all application

SUBSTITUTE ITEM— an item authorized for one-time use in place of another item, based on a specific application and request. Equivalent or interchangeable items are not included in the term "substitute items." No substitute will be used that might adversely affect any of the following:

1. Safety of flight (considering all primary structure and equipment);
2. Efficient performance of any aircraft, engine, accessory, or equipment;
3. Manufacturer's guarantee or warranty; or
4. Delicate, sensitive, or critical assemblies, or those subject to environmental condition, high speed, or high loads.

The authority for a substitute is automatically canceled as soon as a substitution is made. Additional requests for the same substitute item must be considered separately and entirely on the merits which justify its preference.

ACCESSORY— a part, subassembly, or assembly designed for use in conjunction with or to supplement another assembly, unit, or set. It contributes to the effectiveness of the accessory without extending or varying the basic function of the assembly or set. An accessory may be used for testing, adjusting, or calibrating purpose (e.g., test instrument, recording camera for radar set, headphones, emergency power Supply).

ATTACHMENT— to a part, assembly, or subassembly, designed to be used with another assembly, unit, or set. It contributes to the effectiveness of the attachment by extending or varying the basic function of the assembly, unit, or set (e.g., hoisting attachment on a truck, milling attachment for a lathe).

MAJOR COMPONENT— an item supported by an APL, but used in a larger item, such as an equipment. For example, the meat slicer in the enlisted dining facility is an equipment which is supported by an APL, and contains two components, the drive motor and the starter motor, both supported by individual APLs.

MAJOR UNIT OR COMPONENT— a component or segment of an equipment. For example, a radar set may have several major units, among them an amplifier, tuner, antenna pedestal, etc.

ALTERNATE NUMBER— a type of reference number. Identification to an NSN is made normally by use of a primary reference number. Additional numbers that can be used to determine an NSN, such as manufacturers' part numbers, drawing and piece numbers, are referred to as alternate numbers.

REFERENCE NUMBER— any number other than the current stock number, or circuit symbol in electronic equipments, used to identify a part. The most important reference numbers are manufacturers' part numbers. Superseded stock numbers are also a type of reference number. Reference numbers are used in the Master Cross-Reference List (MCRL) and Coordinated Shipboard Allowance List (COSAL) to determine the NSN.

COMMON ITEM— an item of standard design, application, and specification normally procurable from several manufacturers or suppliers, or available from only one manufacturer but with wide usage. Also an item that may have multiple applications.

PRESENTATION SILVER— gifts of silver (a single item or a group of items) occasionally received by U.S. Navy ships from states, municipalities, organizations, individuals, or other sources. (See NAVSUP P485.)

STOCK MEASUREMENT

Accurate measurement of stock is very important. When identifying either material or requirements, you should consult the stock list to be sure you are making the right measurements accurately. For most purposes, a steel measuring tape is accurate enough. For lightweight sheet metal or wire, a wire and thickness gauge is necessary. Stock identification lists contain tables for converting gauge to decimal or fractional parts of an inch.

SYMBOLS AND MARKINGS

As an aid to identification and as a safety precaution, many items are marked by symbols, codes, and serial numbers.

SYMBOLS

In addition to the NSN, symbols and color codes are used on certain metal products, and compressed gas cylinders. These are used primarily by technicians to quickly identify these products and by you for storage purposes. In ordering and expending, the NSN should be used.

Metal Products

Marking of iron and steel (ferrous) and other metal (nonferrous) products is covered by FEDSTD-1836, which provides for continuous marking.

The term "continuous identification marking" means that the marking appears at set intervals on a piece of stock. It is put on with a heavy ink, similar to paint. When a piece of bar stock is cut, each piece should carry the proper identification. The markings must give: (1) the producer's name or registered trademark, and (2) the commercial designation of the material.

Marking terms for the various commercial designations are found in FED-STD- 1836.

Some iron and steel products are not included in the continuous identification marking system outlined in FED-STD-1836. Required markings for these products are included in the material specifications. For example, boiler tubes are not marked continuously, but Navy specifications covering boiler tubes usually require that tubes of a certain size be marked at each end. Smaller tubes than those covered in the specifications may be bundled and tagged. NAVSUP P485 and FED-STD-1836 contain information on how and where these markings must appear on various metal products.

Compressed Gas Cylinders

A common color code for compressed gas cylinders is published in MIL-STD-101 and NAVSUP P-485 to provide a visual warning to supplement the

identification or title lettered on the cylinders, facilitate the segregation of these cylinders at depots, and promote greater safety.

Cylinders are color coded as a visual aid in identifying the gas contained therein. However, complete dependence for identification should not be placed upon the color coding. Positive identification of each gas depends upon the stenciled name and color code of the cylinder and the indented name on the valve body. (See figure 4-4.)

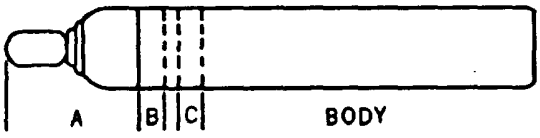
NUMERICAL MARKINGS

To facilitate identification, certain technical material may bear numerical markings assigned either by direction of the responsible command or by the manufacturer. These numbers are used in maintaining records on the material and appear on all vouchers, records, custody cards, and survey reports.

Manufacturers Serial Numbers

Manufacturers' serial numbers may be etched on the material or in case of portable and installed equipment may be attached to the equipment by nameplates. Information usually included on nameplates includes the manufacturer's name, make or model number, serial number, size, and voltage.

COLOR IDENTIFICATION



TYPE OF GAS	COLOR MARKINGS			
	A	B	C	BODY
Acetylene	Yellow	Yellow	Yellow	Yellow
Air (Oil-pumped)	Black	Green	Green	Black
Air (Water-pumped)	Black	Green	Black	Black
Ammonia	Brown	Yellow	Orange	Orange
Argon (Oil-pumped)	Gray	White	White	Gray
Argon (Water-pumped)	Gray	White	Gray	Gray
Argon-Oxygen	Gray	Green	Gray	Gray
Butane	Yellow	Orange	Yellow	Yellow
Butane-Propane mixture	Yellow	Orange	Yellow	Yellow
Carbon Dioxide	Gray	Gray	Gray	Gray
Carbon Dioxide (Fire only)	Red	Red	Red	Red
Chlorine	Brown	Brown	Brown	Brown
Dichlorodifluoromethane (Freon 12)	Orange	Orange	Orange	Orange
Dichlorotetrafluoroethane (Freon 114)	Orange	Orange	Orange	Orange
Ethylene Oxide	Yellow	Blue	Buff	Buff
Ethylene Oxide-Carbon Dioxide(Carboxide)	Buff	Blue	Buff	Buff
Helium (Oil free)	Buff	Gray	Gray	Gray
Helium (Oil pumped)	Gray	Orange	Gray	Gray
Hydrogen	Yellow	Black	Yellow	Yellow
Monobromotrifluoromethane(Fire only)	Red	White	Gray	Red
Monochlorodifluoromethane(Freon 22)	Orange	Orange	Orange	Orange
Nitrogen (Oil pumped)	Gray	Black	Gray	Gray
Nitrogen (Water pumped)	Gray	Black	Black	Gray
Oxygen (Medical)	White	Green	Green	Green
Oxygen, Aviator's Breathing	Green	White	Green	Green
Oxygen, Technical	Green	Green	Green	Green
Oxygen-Nitrogen	Black	White	Green	Green
Propane	Yellow	Orange	Yellow	Yellow

09NP0014

Figure 4-4.—Color codes for compressed gas cylinders.

Other Numbers

DRAWING NUMBERS—Certain technical materials are identified by a drawing or sketch number assigned by the controlling bureau or systems command or by the manufacturer, and must appear on all requisitions when a stock number is not assigned.

JCEC NOMENCLATURE—some items of electronic equipment are identified by Joint Communications Electronics Committee (JCEC) nomenclature (AN/UYK-5(V)) or Navy type (R-390A/URR) or model number (MK 9 MOD 2) as well as stock and serial number. In addition, major units of fire control radar equipment are identified by mark and modification numbers.

MARK AND MODIFICATION NUMBER— Ordnance material usually is given a mark and modification number, a drawing number, and a piece number. These serve to identify the part and facilitate reference to ordnance publications. Ordnance equipment may also be serially numbered, giving individual identify to units that are physically alike. This number is stamped on certain ordnance equipment, such as a rifle or pistol to facilitate identification of the manufacturer and to place responsibility for custody.

TOOLS OF IDENTIFICATION

So far you have studied the need for classifying material, how material is classified, how the NSN is constructed, how the NSN is used to classify material, the types of material used in the Navy, and the various markings used in identification.

The classification of material as to type is important because of the method used in accounting for ship's money. This is discussed later in this TRAMAN.

Material identification does not end with the assignment of a stock number. The customers of the supply system need some means of identifying their requirements with the stock numbers assigned to them, and of detemining the authorized quantities to carry on bead. Identification of these requirements may be determined by using the following lists:

- Management List-Navy-provides current data for requisitioning purposes (unit/issue/price, etc.).
- Allowance Lists—contain the items authorized, and recommended quantities that should be on hand and provide descriptive data which associate a material requirement to an NSN.
- Load Lists-reflect the range and depth of material carried by Combat Logistics Forces (CLF) ships (including tenders and repairships), or bases to fulfill assigned supply support of fleet units.

INTRODUCTION TO FEDERAL SUPPLY CATALOGS AND RELATED PUBLICATIONS (NAVSUP P-4000)

All Storekeepers should become proficient in the use of the *Introduction to Federal Supply Catalogs and Related* Publications (NAVSUP P-4000) because it presents a consolidated text of the features and guidelines for use of various Federal Catalog System and Naval Supply Systems Command (NAVSUP) publications. It also presents instructions which disseminate information relative to items within the Navy Supply System and indicates the interrelationship of the various publications.

Complete and accurate management data must be available for requisitioning purposes and for effective financial and inventory control of material. The Management List-Navy (ML-N) provides the basic management data. Related publications supplement the ML-N by providing additional management data or by consolidating certain information for reference purposes.

The ML-N and related publications are described in detail in individual chapters of the NAVSUP P-4000. Publications covered by this "Introduction" presents data using the format of the national stock number (NSN) and the national item identification number (NIIN). The short descriptions of what is contained in each publication should be used as a first step in obtaining required material identification and management data

The NAVSUP P-4000 is published by the Navy Fleet Material Support Office. This publication is not maintained on a fixed schedule. However, it is updated by change notices when required, or republished when the content is revised significantly.

MANAGEMENT LIST-NAVY

The Management List-Navy (ML-N) is the basic publication relating to NSN management data. It is published in NIIN sequence and includes only items for which Navy interest has been recorded. Ammunition items are included, but the *Catalog of Navy Ammunition Stock,* NAVSEA OD 12067/NAVAIR 11-1-116, is still essential for ordering and reporting.

The ML-N omits subsistence items. The source for subsistence is the book edition of the *Federal Catalog for Subsistence* compiled by the Defense Personnel Support Center. It also omits cryptographic/ cryptologic and Defense Nuclear items which are listed in security classified catalogs produced by the respective DOD agencies.

The ML-N is a Navy-tailored publication; therefore, many NSNs may be found in the MCRL that are not in the ML-N. If the item being researched is not found in the ML-N (including deleted items) and a continuing requirement exists, the using activity must take the necessary action to establish Navy interest. The format of the ML-N is illustrated in figure 4-5.

For definitions and explanations of the various codes and information found in the columns of the ML-N, refer to the *Introduction* to *Federal Supply* Catalogs *and Related Publications,* NAVSUP P-4000.

RELATED PUBLICATIONS

The Fleet Material Support Office publishes related publications that supplement the ML-N by providing additional management data and by consolidating certain information for reference purposes. The following are brief descriptions of these related publications.

MASTER CROSS-REFERENCE LIST (MCRL)

The MCRL published on microfiche provides cross-reference information from reference numbers to NSNs (Part 1) and from NSN to reference number (Part II), to assist in identifying items in the supply system. (Refer to figure 4-6.)

The MCRL is a consolidated publication and includes items of supply which are used by all services; therefore, many NSNs will be listed in the MCRL which are not listed in the ML-N.

Part I of the MCRL is printed in reference number sequence. Reference numbers are sequenced alphanumerical.

You should remember that when looking up a reference number, several methods of representing the number may be used. Different arrangements of the reference number should be tried before deciding that an item it is no longer listed. For example:

137 BCA 123 B

137#BCA/123-B

137-BCA-123-B

137 BCA-123B

137BCA123B

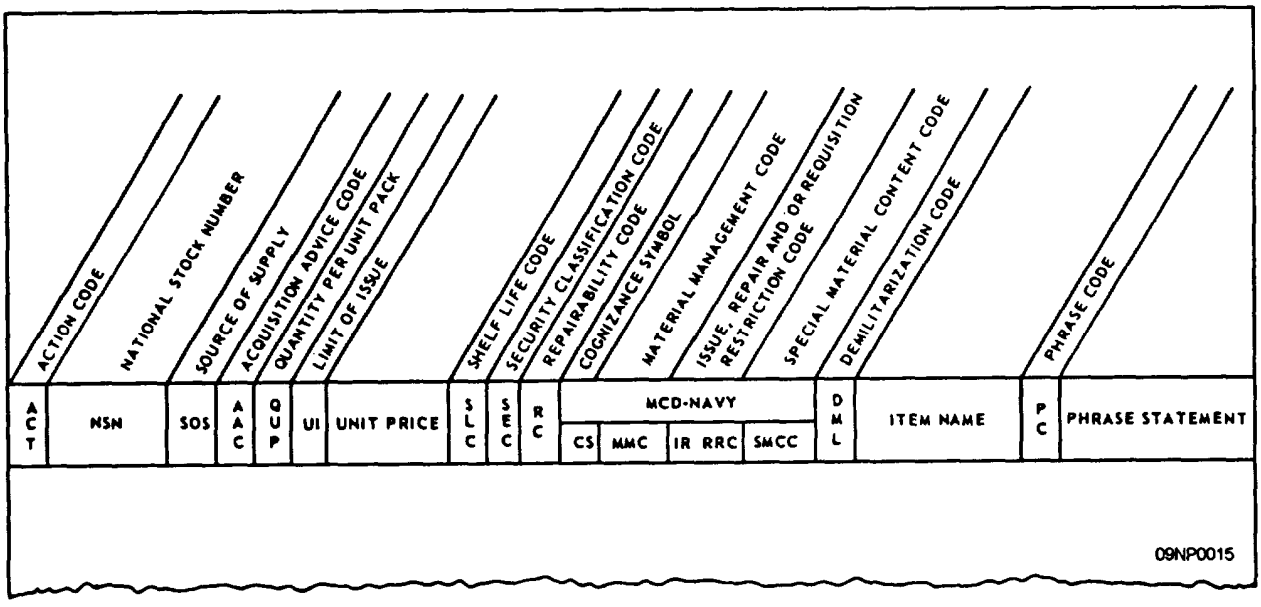


Figure 4-5.-Management List Navy (ML-N).

MCRL PART I

REF. NO.	FSCM	RNVC	NSN
55599	62983	2	4320-00-057-0782
556	24161	2	3030-00-269-9669
556-012-001	16665	2	5950-00-237-7237
556-1137	46859	2	5841-00-323-0747
556-1182	46859	2	5365-00-323-0749
556-2332	46859	2	5305-00-433-9273
556-35-1246FW160P 2	01351	2	3020-00-967-4607
556-3541	46859	2	5365-00-514-0363
556-3541-1	46859	2	5365-00-200-5226

MCRL PART II

NSN	REF. NO.	FSCM	RNVC
4320-00-057-0782	55599	62983	2
5365-00-200-5226	556-3541-1	46859	2
5950-00-237-7237	556-012-001	16665	2
3030-00-269-9669	556	24161	2
5841-00-323-0747	556-1137	46859	2
5841-00-323-0749	556-1182	46859	2
5305-00-433-9273	556-2332	46859	2
5365-00-514-0363	556-3541	46859	2
3020-00-967-4607	556-35-1246FW160P 2	01351	2

09NP0018

Figure 4-6.—Master Cross-Reference List (MCRL), Parts I and II.

Reference numbers having too many characters to permit complete listing on one line in the 16-character field are considered long reference numbers and are continued, indented one space, on the next line or lines.

Since January 1980, seven basic elements of information were included in the MCRL. Each microfiche includes two similar sets of data. The information is presented as follows

- Reference Number—A number, other than an activity stock number, used to identify an item of production.
- Commercial and Government Entity—The applicable manufacturers assigned five-digit code as listed in the cataloging Handbook H4-2.
- National Stock Number—The NSN assigned to the reference number.

Reference Number Variation Code-A code indicating whether the reference number is item identifying or requires additional data to correctly identify the item of supply.

Reference Number Category Code—A code that designates the relationship of a reference number to the item of supply.

Description Available—Description available/not available.

Item Name—Nomenclature of the item.

For a more complete description of the above titles and their codes, refer to the NAVSUP P-4000.

LIST OF ITEMS REQUIRING SPECIAL HANDLING (LIRSH)

The LIRSH is published to identify items which require special handling. This is a reference publication

used in conjunction with other publications, such as the MRIL and/or *Hazardous Material Information Systems* (HMIS).

Items are listed in NIIN sequence. Each microfiche is arranged, as shown below. Blanks indicate that a specific code is not applicable to the NSN.

- Cog—The cognizance code assigned to the NSN.
- MCC—The material control code assigned to the NSN.
- FSC—The Federal supply class assigned to the item.
- NIIN—The national item identification number.
- SMIC—The special material identification code.
- REP—The repairable material code.
- SCC—The security classification code.
- SL—The shelf-life code.
- SLA—The shelf-life action code.
- HZD—The hazardous material identification/ classification code.

In addition the following categories of items requiring special handling are contained in the LIRSH:

- Repairable Items-Refer to NAVSUP P-4107, Master Repairable Item List (MRIL), for turn-in instructions.
- Shelf Life—Items determined by the inventory manager to be deteriorative in nature.
- Physical Security Code Item—refer to OPNAVINST 5510.1C for special handling instructions. (other than unclassified SCC "U" items.)
- Hazardous Items-Refer to DOD 6050.5L and LR, HMIS, for labeling and storage requirements.

The codes and definitions for data printed in the LIRSH are listed in the NAVSUP P-4000.

MASTER REPAIRABLE ITEM LIST (MRIL)

The MRIL is a catalog of Navy-managed repairable items. The primary purpose of the MRIL is to provide fleet activities the data required for disposition of NRFI (Not Ready for Issue) repairables, including repair level data, shipping data, or, when applicable, local disposal instructions. In addition, other selected management data is provided. The MRIL is with the instructions listed below. When preparing repairable for retrograde shipment for:

- SHIPS—follow the instructions for documentation, marking, tagging and transfer/shipment found in NAVSUP P-485. Guidance for protecting and packaging repairables for shipment is found in NAVSUP P-484.
- STRATEGIC SYSTEMS PROJECT OFFICE COGNIZANCE MATERIAL—This includes Cognizance Codes 6A, 6H, 8H, 2P, 4P, 6P, 8P, 2X, 4X, 6X, and 8X. FLEET Ballistic Missile (FBM) activities will process FBM repairable in accordance with the FBM Master Repair List (MRL) as specified in SPCCINST 4423.39 series. These are the FBM Weapon System Repairable Program Requirements and Procedures. Non-FBM activities should prepare invoices and ship these materials in accordance with the instructions contained in the MRIL.

References to applicable instructions for shore activities and foreign governments when preparing repairables for retrograde shipment are contained in the NAVSUP P-4000.

The MRIL is divided into two parts:

Part I—Listing of Items: Contains NSNs and NICNs of repairable items, and aircraft engine type/mode/series identifiers, and information needed to make repair/turn-in determinations on repairable and aircraft engines. Items in this part are listed in the following sequence: (1) NICNs in NIIN sequence, (2) NSNs in NIIN sequence, and (3) engine models in alphanumeric sequence. (See figure 4-7.)

Part II—Shipping Addresses: Contains addresses of designated overhaul points (DOPs) including contractors, and other indicated destination for all items listed in Part 1. Addressees are listed in shipping code sequence. (See figure 4-8.)

How to Use the MRIL

IF THE NATIONAL STOCK NUMBER IS NOT KNOWN. Look up the part number/reference number In the MCRL.If part number appears more than once, refer to CAGE (using Cataloging Handbook H4-2) to determine the manufacturer. Once the right part number has been found, the NIIN can be determined. Using the NIIN, refer to Part I for shipping instructions.

PART I—LISTING OF ITEMS

LONG SUPPLY IND.	SCHED REMOVAL COMP CARD CODE	COG SYMBOL/ MAT'L CONTROL CODE		NATIONAL STOCK NUMBER/ NAVY ITEM CONTROL NUMBER	SPEC. MAT'L IDENT CODE	REPAIR LEVEL CODE	SECURITY CLASS	SHIPPING CODE	MOVEMENT PRIORITY DESIGNATOR	NOTES
L S I	S R C	C O G	M C C	NSN/NICN	SMIC	R L C	S E C	SHPG CODE	M P D	NOTES
•		7E	H	1325-LL-HDZ-0925		D	U	N00163	13	
	Y	2R	H	1560-00-076-4591	GT	I	U	W20203	13	WISSA
		2R	H	1630-00-085-2625	LC	I	U	W20243	13	DMISA
	Y	2R	H	6610-00-086-1632	FZ	I	U	N00207	13	HI-BURNER
		2R	E	5865-00-100-7298	FE	I	U	C20079	13	CLAMP
•		2R	H	5865-00-117-4136	BA	I	U	XX	13	
		7H	H	1010-00-381-0658		D	U	N00189	13	CTNR 7835002
		6A	Q	4935-00-412-5854		D	U	N00612	06	SEE SP4423.39 BLUESTRIPE
	Y	7H	E	1440-00-421-4388		D	U	N00109 N60701	03	FIRM ITEM REDSTRIPE

09NP0017

Figure 4-7.—Master Repairable Item List (MRIL), Part I.

PART II—SHIPPING ADDRESSES

SHIPPING CODE	SHIPPING INSTRUCTIONS	UNIT IDENTIFICATION CODE/FEDERAL SUPPLY CODE FOR MANUFACT.
SHIPPING CODE	SHIPPING INSTRUCTIONS	UIC/FSCM
C44100	SHIP TO: CDR DCASR NEW YORK C/O TREADWELL CORPORATION RAILROAD STREET THOMASTON, CONN 06787 SPECIAL MARKINGS: FOR OVERHAUL AND REPAIR ON CONTRACT N00104-71A-0174	Q81412

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Figure 4-8.—Master Repairable Item List (MRIL), Part II.

IF THE NATIONAL STOCK NUMBER IS KNOWN. Refer directly to Part I for turn-in instructions.

USING PART I. Look over the entire line item entry noting such elements as Security Classification, and Notes. If the item has not been processed through art intermediate maintenance activity, note the repair maintenance code (RMC). If RMC is "O" (for Organizational) or "F," "G," "H," (for Intermediate), take action to attempt local or intermediate repair as appropriate. (NOTE: Make sure that replacement requisitions are not submitted until local or intermediate repair efforts have been exhausted.) If the "Shipping Code" column shows a six-character shipping code, refer to Part II for shipping document marking instructions. If the "Shipping Code" column shows one of the special two-digit codes, take action as indicated.

HAZARDOUS MATERIAL INFORMATION SYSTEM

The HMIS (DOD 6050.5L and LR) provides information to assist users who handle hazardous materials in the performance of their jobs to minimize the risk. There is a wide range of data in the HMIS related to safety, health, packaging, labeling, transportation, and disposal of hazardous materials. HMIS also provides labeling and packing requirments, shipment, storage, and handling safety precautions as well as other characteristics of the items listed. The listing is separated into three sections as follows:

- Trade Name/Product Identity Cress Reference
- Part Number Cross Reference (PN XREF)
- Specification Number Reference (SPEC XREF)

NOTE: The HMIS mentioned above is in microfiche format and consists of two versions, The DOD 6050.5L contains nonproprietary information and DOD 6050.5LR contains both nonproprietary and proprietary information. The HMIS is also produced in Compact Disk format.

AFLOAT SHOPPING GUIDE (ASG)

The Afloat Shopping Guide, (NAVSUP P-4400) is designed to assist you in identifying NSN items most frequently requested by ships. It includes:

- a detailed description of each item,
- a specific code to designate items carried by combat logistics forces (CLF) ships,
- the stock numbers of substitute items, if any, and
- the specifications for illustrations or diagrams of many types of material. Refer to figure 4-9 for a sample page from the ASG.

IDENTIFICATION LISTS (ILs)

ILs provide descriptive and illustrative data used to identify or select items of supply. Data is provided only for active, descriptive-type items of supply which have at least one recoded user.

ILs are consolidated publications used by all services. Some NSNs identified in the ILs are not listed in the ML-N.

ILs are published by Federal Supply Class/Federal supply Group. Each contains an introduction and specific instructions for its use.

Stock numbers for each IL are assigned by the Navy Publications and Forms Directorate, Philadelphia PA, and are included in the NAVSUP P-2002.

Each IL consists of at least two microfiche. The first fiche contains the:

- Catalog Identification frame
- Instructions for use
- Introduction
- Abbreviations
- Item Name Index

The second frame contains an NSN Index and the Identification Data consisting of Descriptive Method Items and Illustrations.

Each microfiche has an Index frame located in the lower right comer of the microfiche (frame 01 8). This frame will show the first NSN or Item Name on each frame of the microfiche. For the NSN Index, frame 018 will show the first NSN on each frame and for the Descriptive Section, the first Item Name.

Each microfiche is by identified by a title printed across the top of the microfiche that can be used without a reader.

Distribution of ILs to afloat units, except for petroleum, medical, and subsistence items is restricted to load carrying ships and aircraft carriers. Requests *from* other ship classes for ILs excluded as above must be submitted via the appropriate type commander via SPCC.

NAVY ITEM CONTROL NUMBER TO NATIONAL ITEM IDENTIFICATION NUMBER, (NICN to NIIN)

The NICN to NIIN file is designed as a cross-reference to assist in the identification of those NICNs that which have assigned NSNs. This publication is distributed on microfiche only and sequenced by the last nine digits of the NICN as shown in figure 4-10.

NICNs are not included in the Navy Management Data File (NMDF) nor in the Management List-Navy (ML-N). However, a separate history file containing NICN to NIIN cross-reference is maintained at SPCC.

09NP0019

Specification Data--MIL-R-94

TYPE	TAPER	WATTS	BUSHING SIZE	SHAFT DIA.	BODY DIM.	FIG
RV2	A	1	3/8-32	1/4	.64 x .42	1
RV2	C	1/2	3/8-32	1/4	.64 x .42	1
RV4	A	2	3/8-32	1/4	.90 x .45	1
RV4	C, F	1	3/8-32	1/4	.90 x .45	1
RV5	A	1/2	1/4-32	1/8	.75 x .37	1
RV6	A	1/2	1/4-32	1/8	.50 x .37	2
RV6	C, F	1/4	1/4-32	1/8	.50 x .37	2

1 WATT

Locking bushing, 5/8 in. lg shaft.

	Ohms	Mil Type RV2LAYSA
00-815-5498	10K	103A

Standard bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV2N
00-835-8870	1.5K	AYSD152A
00-577-6803	10K	AYSD103A
00-964-6059*	10K	BYSD103A
00-853-0798	100K	AYSD104A

*With SPST switch.

2 WATT

Locking bushing, 5/8 in. lg shaft.

	Ohms	Mil Type RV4LAYSA
00-681-8688	50	500A
00-503-5984	100	101A
00-503-6218	250	251A
00-539-4897	500	501A
00-646-5958	1K	102A
00-539-2567	2.5K	252A
00-539-2479	5K	502A
00-518-5595	10K	103A
00-501-7314	25K	253A
00-501-5184	50K	503A
00-665-4992	100K	104A
00-552-2093	250K	254A
00-518-5593	500K	504A
00-518-5609	1MEG	105A
00-552-5487	5MEG	505A

Locking bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV4LAYSD
00-577-3717	2.5K	252A
00-577-3645	25K	253A
00-556-3042	100K	104A
00-023-7931	1MEG	105A

Standard bushing, 1/2 in. lg shaft.

	Ohms	Mil Type RV4NAYSB
00-542-8046	1K	102A
00-646-5957	10K	103A
00-646-5981	25K	253A
00-643-6284	50K	503A
00-542-8048	100K	104A
00-542-8051	1MEG	105A

Standard bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV4NAYSD
00-556-3041	100	101A
00-552-2859	500	501A
00-552-5478	1K	102A
00-577-9976*	1K	
00-539-5013	2.5K	252A
00-643-5626	5K	502A
00-578-4471	7.5K	752A
00-556-3350	10K	103A
00-552-5479	15K	153A
00-539-1559	25K	253A
00-539-4900	50K	503A
00-644-6693	100K	104A
00-552-5476	250K	254A
00-893-9499	500K	504A
00-501-7307	1.5MEG	155A
00-655-3312	2MEG	205A

*With SPST switch, MIL Spec type RV4NBYSD102A.

Standard bushing, 1-1/4 in. lg shaft.

	Ohms	Mil Type RV4NAYSG
00-811-1750	2.5K	252A

Standard bushing, 2-1/2 in. lg shaft.

	Ohms	Mil Type RV4NAYSK
00-539-4999	100	101A
00-539-2568	250	251A
00-557-4637	500	501A
00-500-7588	1K	102A
00-542-8724	2.5K	252A
00-666-1036	5K	502A
00-665-5095	10K	103A
00-581-2846*	10K	
00-500-7879	25K	253A
00-542-8744	50K	503A
00-339-4576	100K	104A
00-539-4578	250K	254A
00-539-4998	500K	504A
00-552-2254	1MEG	105A

*With SPST switch, MIL Spec type RV4NBYSK103A

C TAPER

1/4 WATT

Standard bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV5NAYSD
00-802-7951	5K	502C

	Ohms	Mil Type RV6NAYSD
00-851-5648	5K	502C
00-954-4038	10K	103C

1 WATT

Locking bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV4LAYSA
00-578-9051	1MEG	105C

Standard bushing, 7/8 in. lg shaft.

	Ohms	Mil Type RV4NAYSD
00-681-6172	500	501C
00-552-3480	10K	103C

Standard bushing, 7/8 in. lg. (Shaft and panel sealed.)

	Ohms	Mil Type RV4SAYSD
00-542-9406	500	501C

Standard bushing, 2-1/2 in. lg shaft.

	Ohms	Mil Type RV4NAYSK
00-553-9970	2.5K	252C
00-578-4134	50K	503C

F TAPER

1/4 WATT

Locking bushing, 5/8 in. lg shaft.

	Ohms	Mil Type RV6LAYSA
00-752-3377	50K	503E

1 WATT

Locking bushing, 5/8 in. lg shaft.

	Ohms	Mil Type RV4LAYSA
00-683-5996	10K	103E

INDUSTRIAL TYPE. A taper. Fully inclosed body with 1/4 in. diameter slotted shaft and mounted by a 3/8 - 32 thread bushing.

Single section

2-1/4 Watt at 70 deg C, body dimension. 11/16 in. lg x 1-5/32 in. diameter, 1-7/16 in. lg shaft, panel sealed bushing, 3 solder lug terminals.

00-482-4992	350 OHMS	10% tol

3 Sections

2 Watt at 70 deg C, body dimension. 1-29/32 in. lg x 1-5/32 in. diameter, 5/8 in. lg shaft, 9 solder lug terminals.

00-264-7818	2.5 meg, 2.5 meg, 20%, 25K, 10%

Figure 4-9.—Page from the Afloat Shopping Guide, (ASG).

NICN	CNC	NIIN	COG	FSC
LLHD59889	MA	008912963	9C	2920

Figure 4-10.—Navy Item Control Number to National Item Identification Number, (NICN to NIIN).

OTHER AIDS IN IDENTIFICATION

In addition to the ML-N and related publications, other aids and sources are available to assist you in identifying a requirement. These are discussed below.

Department of Defense Sections of the Federal Supply Catalog

DOD sections of the *Federal Supply Catalog* are published by defense supply centers for use by the military services. Each DOD section contains items in the FSC groups and classes assigned to a particular Defense Supply Center. Also contained is identification, price, and management data for each item. DOD sections of the *Federal Supply Catalog* are listed in the Navy Stock List of Publications and Forms, Cognizance Symbol I, Section 1.

GSA Supply Catalogs

GSA Supply Catalog Series consists of a guide and four commodity catalogs, identified as follows:

The guide section contains consolidated alphabetical and NSN indexes for the items listed in the four commodity catalogs. It directs the user to the catalog that contains the listing of the item sought. There is also detailed information about the Federal Supply System (FSS) Stock program and requisitioning procedures.

The tools catalog contains listings of common and special-use tools. It includes many of the tools listed in earlier GSA catalogs and has alphabetical and numerical indexes and a price list.

The office products catalog lists a wide variety of items for office use, including paper supplies, forms, and equipment. It, too, has alphabetical and numerical indexes and a price list.

The industrial products catalog lists a broad range of items. They include hardware, paints, adhesives, chemicals, machinery, building materials, and cleaning equipment and supplies. It has alphabetical and numerical indexes and a price list.

The furniture catalog is a single source of information for all furniture items presently stocked by FSS. It should be used as sole guide for selecting furniture and related items.

GSA supply publications are prepared for civilian agencies. Before processing requisitions for GSA items, fleet units should refer to the ILs or ML-N for supply management data.

Commercial and Government Entity

The Commercial and Government Entity (CAGE) is a five-position, numeric code. These codes are assigned to manufacture or commercial firms who maintain design control for items of supply procured and cataloged for federal agencies. Although the basic purpose of the system is to identify manufacturing organizations, it also includes special nonmanufacturing organizations, primarily to facilitate the processing of Federal Catalog data.

The CAGE coding system is used in machine accounting operations related to support management programs, such as cataloging and standardization. The SK uses the CAGE in conjunction with the MCRL. When using the MCRL to determine an NIIN, you often find the same reference number listed more than once with each having a different NIIN. For accurate item identification, it is necessary to select the NIIN from the MCRL showing the CAGE for the company that made the needed part.

The CAGE is published on microfiche in three parts as follows:

H4-1—Name to Code (in name sequence)

H4-2—Code to Name (in numeric sequence)

H4-3—NATO Supply Code for Manufacturers (excluding USA and Canada)

The Commercial Government and Entity is published in two parts as follows:

H8-1—Name to Code (in name sequence)

H8-2—Code to Name (in numeric sequence)

Navy Stock List of Publications and Forms

The *Navy Stock List of Publications and Forms* (NAVSUPP-2002), commonly referred to as the "I Cog Catalog." It is published on microfiche and consists of three sections as follows:

Section I—Alphabetic/Numeric Listing of Form, Publication, Hull, Electronic Model Numbers, and Standard Subject Identification Cede for Cog 11 Forms.

Section II—Alphabetic Listing of Publications and Forms by Title/Nomenclature.

Section III—Numerical Listing of Publications and Forms by Stock Number followed by NAVAIRSYSCOM Technical Directives (by type and directive number). Publications and forms are sequenced together.

Microfiche editions are issued quarterly. Each edition reflects current Cog II Publications and Forms. Section I and Section III reflect information such as Canceled, No Superseding Item, Superceded By, and Replaced By.

The *Introduction to the Navy Stock List of Publications and Forms* provides detailed information about the columnar arrangement of the stock list. It also has the instructions needed to requisition publications and forms.

Manufacturers' Instruction Books

Equipment purchased by the Navy has instruction books or technical manuals from the manufacturer. NAVSEA assigns publication numbers to these books so they can be ordered through the supply system. They are used by operating and maintenance personnel to help them obtain top perform ante from the equipment. They include parts lists and detailed drawings and specifications. You will use them often to help you accurately identify repair parts that must be adressed.

Figure 4-11 is an example of a parts list for a laundry tumbler. It was manufactured by American Laundry Machinery Industries of Cincinnati Ohio. The CAGE for this company is 02432. If you were looking up the NSN for a new front cylinder bearing #6207 in the MCRL, you would find several entries for that part number. However, none show an CAGE of 02432. Now, take another look at figure 4-11, and you will see the initials "SKF" following "cylinder bearing." This shows that:

1. The tumbler was manufactured by American Laundry.
2. The bearings were manufactured by SKF Industries the part number is #6207.
3. The CAGE for SKF Industries is 52676. You will find that part number SKF6207 with an CAGE of 52676, crosses to NIIN 00-516-5490 in the MCRL.

Also, note that the tumbler belt was manufactured by Browning and a Browning part number is used. So when using the MCRL, be sure you are looking for the right part number with an CAGE for the company that retie the part.

The drawings and specifications will sometimes help you find a substitute for a needed repair part using the catalog identification lists.

Assistance from Technical Ratings

Never overlook the assistance available from people in the technical ratings, and do not hesitate to ask for help when an identification problem has you stumped.

You are not required to know symbols or value codes that are used on electronic parts, but technicians in the electronic ratings should. It is not your job to determine if a tolerance of .005 is permissible for a bearing, or if that bearing requires grease meeting specification MIL-G-7187 or VV-G-671.

Your job is to use the information provided by customers so you can translate their requirements into the right NSN. When you need more information or are in doubt about the NSN, ask the expert. It is better to ask and be sure than to guess and be wrong.

Assistance Ashore

When your efforts to find the NSN for a part have failed, there are still sources of assistance available to help. Supply centers and the supply departments of naval stations and shipyards have technical sections that can usually provide an NSN if there is one. You should not depend on them to do your work, but they are available to assist when needed.

ALLOWANCE LISTS

Allowance lists specify the type and quantity of equipment, equipage, repair parts, and supporting materials that a ship in commission is required to carry on board.

COSAL

The Coordinated Shipboard Allowance List (COSAL) is the most used allowance list for determining repair part NSNs. It contains items authorized and recommended quantities that should be on hand and provides descriptive data which associate a material requirement to an NSN. The use of the COSAL is described in SPCCINST. 4441.170A.

AVCAL

The Aviation Consolidated Allowance List (AVCAL) contains a list of items authorized that should be on hand to support aviation equipment.

DATE 30 June --

MFRS. MASTER PLAN NUMBER 2218-MP-2 Rev. A BUREAU NUMBER None Assigned

NAMES AND NUMBERS OF VESSELS See Sheet No. 1

APPLICATION Shipboard Laundry APPLIANCE 37"x30" Drying Tumbler

NAVY CONTRACT OR SHIPBUILDERS ORDER NUMBER See Sheet No. 1

MANUFACTURER AMERICAN LAUNDRY MACHINERY IND., Cincinnati 12, Ohio

ITEM NO.	NUMBER OF SETS	NUMBER PER SET	NAME OF PART OR TOOL	MANUFACTURER'S DATA			
				PART NUMBER	DRAWING	PC.	
1	1	1	"V"-Belt, Browning	5L490	2218-MP-2	70	
2	1	1	Roller Chain, mer. Std. #40 ½" Pitch, 73" Long	Commercial	"	71	
3	1	2	Cylinder Bearing, SKF (1 each-front & rear)	#6207 #6208	" "	11 13	
4	1	1	Brush for Cleaning Heater Fins	Commercial	"		

FOR
37" x 30" Tumbler Dryer
440 Volts, 60 Cycles, 3 Phase, AC

LEGEND

WHEN REORDERING ALWAYS INCLUDE
1 - COMPLETE NAME PLATE DATA INCLUDING SERIAL NO.
2 - MFG. AND BUREAU PLAN NO.
3 - MFG. PART NO.
4 - THIS DRAWING NO.

DRAWING NUMBER
2218-CD-3 Rev. C

BUREAU DRAWING NUMBER
DLG 16-609-1,845,458 Rev. C

SHEET 2 OF 5 09NP0020

Figure 4-11—Parts list page from NAVSEA Technical Manual.

LOAD LISTS

Load lists reflect the range and depth of material carried by Combat Logistics Forces (CLF) ships (including tenders and repair ships), or bases. They, like allowance lists, provide descriptive data that associates a material requirement to an NSN. The use of load lists is described in the NAVSUPP-485.

Instructions for locating Stock/ReferenceNumbers in the Microfiche Editions of Supply Catalogs, Information on the ML-N and other dated publications is covered in chapter 3 of this manual.